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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/763,409	02/22/2001	Jiro Iriyama	Q63249	5069

7590 10/27/2003
Sughrue Mion Zinn Macpeak & Seas
2100 Pennsylvania Avenue N W
Washington, DC 20037-3202

EXAMINER

MERCADO, JULIAN A

ART UNIT	PAPER NUMBER
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1745

DATE MAILED: 10/27/2003

11

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Applicati n N .

09/763,409

Applicant(s)

IRIYAMA ET AL.

Examin r

Julian A. Mercado

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 10-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) 10-27 is/are allowed.
- 6) ☐ Claim(s) 28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other:

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DETAILED ACTION

Remarks

This Office Action is responsive to applicant's reply filed August 4, 2003.

Claims 10-28 are pending.

The objection to claims 12 and 13 has been withdrawn.

Acknowledgement is made of applicant's submission of a translation of the foreign priority papers in accordance with 37 CFR 1.55.

In view of applicant's perfection of foreign priority, the rejection of claims 10, 11, 21-25 and 28 under 35 U.S.C. 102(e) based on Yoon et al. (U.S. 6,482,547 B1), and the rejection of claims 12-19 under 35 U.S.C. 103(a) based on Yoon et al. and Takami et al. (U.S. Pat. 5,340,670) have been withdrawn.

Claims 10-26 are directed to an allowable product. Pursuant to the procedures set forth in the Official Gazette notice dated March 26, 1996 (1184 O.G. 86), claims 26 and 27 directed to the process of making or using the patentable product, previously withdrawn from consideration as a result of a restriction requirement, are now subject to being rejoined. Claims 26 and 27 are hereby rejoined and fully examined for patentability under 37 CFR 1.104. As such, claims 26 and 27, drawn to a process of making an allowable product, are allowed.

Since all claims previously withdrawn from consideration under 37 CFR 1.142 have been rejoined, the restriction requirement made in Paper No. 5 is hereby withdrawn.

A new ground of rejection is set forth below. This Office Action is therefore made NON-FINAL.

Claim Rejections - 35 USC § 102

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim 28 is rejected under 35 U.S.C. 102(b) as being anticipated by Parish et al. (U.S. Pat. 5,075,036) and as evidenced by Encyclopedia Britannica. (online article accessed October 20, 2003, <http://www.britannica.com/eb/article?eu=20556>)

Parish teaches a composition comprising a) graphite particles and b) carbon black. (col. 4 line 3-5) The graphite particles are disclosed as lamellar, i.e. flat, planar or flake etc. in structure. (col. 4 line 34-37)

While the carbon black is not explicitly disclosed as amorphous, carbon black is notoriously known as an amorphous carbon pigment produced by the thermal decomposition of natural hydrocarbons, e.g. the furnace black and the channel black disclosed in Parish. (col. 4 line 28-33) As evidence, the Encyclopedia Britannica specifically recites that carbon black is indeed amorphous in structure, “any of a group of intensely black, finely divided forms of amorphous carbon, usually obtained as soot from partial combustion of hydrocarbons, used principally as reinforcing agents in automobile tires and other rubber products but also as extremely black pigments of high hiding power in printing ink, paint, and carbon paper.”

This rejection is set forth to the extent that the limitation “a non-flake graphite material whose surface is covered with amorphous carbon” does not preclude amorphous carbon itself, especially in view of carbon black (being an amorphous carbon) is also “a non-flake graphite material”.

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The instant weight ratio of 10:90 to 70:30 are taught by Parish to the extent that the disclosed weight ratio of the graphite particles and carbon black being from 15 to 85 wt. % and 85 to 15 wt. % overlaps therewith.

Allowable Subject Matter

Claims 10-27 are allowed.

The following is an examiner's statement of reasons for allowance: the prior art of record and to the examiner's knowledge do not teach or render obvious at least to the skilled artisan the instant invention regarding a nonaqueous battery including at least the two components of flake graphite particles and non-flake graphite particles whose surface is covered with amorphous carbon.

An updated prior search revealed U.S. Patent 5,723,232 to Yamada et al. Yamada falls short in teaching or at least suggesting the claimed invention in that an amorphous carbon coating, present in admixture with graphite particles, coats 50% by weight of said particles. (col. 6 line 23-64) The graphite particles, however, are present in flake form. (col. 9 line 47)

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

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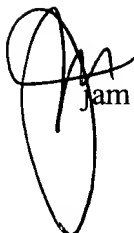
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julian A. Mercado whose telephone number is (703) 305-0511.

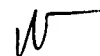
The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick J. Ryan, can be reached on (703) 308-2383. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.



jam



Patrick Ryan
Supervisory Patent Examiner
Technology Center (703)